Glossary

barycenter	The center of mass of a system of particles or bodies.
coherent	Pertaining to two radio signals in a relationship such that one is an exact numeric multiple of the other.
declination	In astronomical spherical coordinates, the angle above or below the plane passing through the origin of the coordinate system and normal to the polar axis.
ecliptic	The plane containing the orbit of Earth about the Sun.
ephemeris	A representation of the position, within a defined reference system, of a planet, moon, or spacecraft as a function of time.
epoch	An instant in time that defines an event.
fiducial station	A tracking station whose location is held fixed for the purposes of data processing.
maser	A microwave device that, when stimulated by a weak signal, will emit a stronger signal at a related frequency. Derived from *m*icrowave *a*mplification by *s*timulated *e*mission of *r*adiation.
mean equator and equinox	Reference frame models that account for only precession.
nutation	The short-period (a few decades or less) motion of Earth's spin axis, expressed in inertial coordinates.
observable	A quantity, such as time or distance, determined from a measurement.
phase-locked loop	An algorithm to adjust a local reference signal so that it maintains a constant phase relationship with an input signal.
plane-of-the-sky	A plane containing the spacecraft that is orthogonal to the line of sight from the observer to the spacecraft.
precession	The long-period (centuries) motion of Earth's spin axis, expressed in inertial coordinates.

quasar	A quasistellar extragallactic object that emits powerful radio waves.
residual	The difference between an observed and a modeled value.
right ascension	In astronomical coordinates, the angle about the polar axis, measured from a defined origin.
topocentric	Pertaining to a measurement from the surface of a reference body.
true equator and equinox	Reference frame models that account for both precession and nutation.